

Low carbohydrate diet rescued severe type 2 diabetes patient from insulin injection, a case report

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ABSTRACT

Fifty-six years old male type 2 diabetes patient with fasting blood sugar (FBS) 414 mg/d and hemoglobin A1c (HbA1c) 10.7% tried low carbohydrate diet (LCD) 30 days. After the diet, his FBS decreased to 174 mg/d and HbA1c was 7.7%. Therefore, he escaped from insulin injection and was able to treat with metformin.

Keywords: Diabetes, low carbohydrate diet, HbA1c

One month ago, 56-year-old male, 180 cm height and 96 kg weight doctor having hypertension, in a word, me, the author himself, checked his blood and was shocked. The fasting blood sugar (FBS) was 414 mg/d and hemoglobin A1c (HbA1c) was 10.7%. Two years ago, his FBS was 111 mg/d and HbA1c was 6.3%. His colleagues advised him to visit diabetes specialist clinic, but he didn't. He was afraid that diabetes specialist might treat him with insulin injection. Serum insulin level was 12.5 μ U/ml and anti-glutamic acid decarboxylase antibody was negative so that he was diagnosed as type 2 diabetes. Then, he decided to try low carbohydrate diet (LCD) in 30 days. In these 30 days, he completely avoided to take any carbohydrate including rice, bread, or noodles. Before that, he took sweet yoghurt every day but he changed it to yoghurt without sugar. He didn't care about calory intake. Other than carbohydrate, he took anything as much as he wanted [Figure 1]. Thirty days later, today, his FBS was 174 mg/d and HbA1c was 7.7%. Body weight was 97 kg. Therefore, he started with metformin 500 mg a day.

Discussion

There are arguments both for and against about LCD. In short term, it is effective to blood sugar control and body weight loss.^[1,2] But systematic review said LCD improve FBS, triglyceride, and HbA1c while it did not decrease body weight.^[3] Noto H *et al.* pointed out that long term LCD increase all-cause mortality.^[4] Therefore, the author does not fully



Figure 1: Foods I took in LCH days. Two Indian curries with no nan, no rice (left) and an Indian curry and a tandoori chicken (right). Curries in Europe and Japan contains flour but Indian curry does not contain

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recommend long term LCD. But in case of me, short term LCD can dramatically improve FBS and HbA1c and avoid hard intervention such as insulin injection or many kinds of anti-diabetes drugs intake.

Conclusion

Short term (30 days) LCD was effective for a severe type 2 diabetes patient.

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Conflicts of interest

There are no conflicts of interest.

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